

CCSA Response to the BEIS Ofgem Energy Future System Operator Consultation

28th September

The Carbon Capture and Storage Association (CCSA) is pleased to provide a response to the BEIS and Ofgem Energy Future System Operator Consultation. The CCSA brings together a wide range of specialist companies across the spectrum of Carbon Capture, Utilisation and Storage (CCUS) technology, as well as a variety of support services to the energy sector. The CCSA exists to represent the interests of its members in promoting the business of CCUS and to assist policy developments in the UK, EU and internationally to support the commercial deployment of CCUS.

This response focuses on **Chapter 3. What should a Future System Operator do?**

In particular, section 3.2, which sets out potential new and enhanced roles and functions required for net zero that could sit with the FSO. This includes other areas/energy vectors (e.g. hydrogen and CCUS) that the FSO could play a greater role in as the system developed.

11. Do you have views on the proposal for an advisory role? What organisations do you consider would benefit from the provision of advice by the FSO? Who should bear the costs of providing that advice?

In an energy system that is changing rapidly towards net zero, there will be the need to identify barriers, opportunities and trade-offs across all parts of the energy system and to fully understand how they will all interact. The development of hydrogen and CCUS will have significant interactions with the decarbonisation of transport, heating and power and it will be essential to coordinate across all relevant sectors to ensure successful planning and deployment of these industries.

It is not clear how an advisory role, with a duty on the FSO to provide advice where requested by decision-making organisations, would be necessary if Government direction is clear with strategic policy statements in place alongside; long-term advice, ambition and targets from independent bodies such as the Climate Change Committee and National Infrastructure Commission.

There is a danger that adding another layer to this will reduce the power and influence of each of the existing bodies and slow down any decision-making processes. However, there is a role for strategic direction on growth of the CCUS and hydrogen networks, but this is yet to be defined as to whether this will sit with the networks themselves, the economic regulator or Government through strategic policy statements.

12. Do you have any views on the other areas where we are considering new and enhanced roles and functions for the FSO (outlined in section 3.2)?

We recognise that there will be interactions between gases and their storage (covering natural gas, biomethane and hydrogen) and between decarbonisation of energy sectors including power, heat, transport and industry. In order to be effective and give sound advice and direction, the FSO will need to have to have expert knowledge in all these systems to understand how they operate both technically and financially.

As a suite of investments, CCUS benefits all of these and may touch on parts of the immediate product and service delivery of these sectors. CCUS's role is mainly to add value to the energy vectors by uniquely providing certifiable and measured anthropogenic CO₂ removal from the atmosphere. As such, it is a policy and commercial option focused on CO₂e reduction at least cost and maximising the investment attractions of CCUS. This is a complex task in its own right and there is a significant new range of issues to be addressed compared to managing the functioning of the gas and electricity system.

CCUS and hydrogen are nascent sectors that will need to go through a period of rapid development, innovation and deployment over the next 10 years if we are to meet the UK's net zero targets. CCUS has different interfaces with international actions with the potential to add financial market and non-energy value to the UK. Hydrogen storage has a different role than natural gas storage and its transition from selected customers to a system service for wind, solar and natural gas inputs to hydrogen supplies will require specific attention.

An FSO could possibly oversee a network build-out and expansion and would need to consider the interdependencies of CO₂ Transport and Storage networks with the wider gas and electricity networks. However, it is unclear exactly what roles could emerge in relation to CCUS transport and permanent storage, particularly when considering a possible future role of shipping, trucks and rail.

At least in the early stages, the T&S networks will be localised with a relatively small number of emitters. There is a danger that a fully integrated FSO could provide a disproportionate administrative burden to a developing industry that will need to attract investors and rapidly deploy. There is also a risk that if one FSO is making all the decisions towards delivering net zero, there is no room for error and it may minimise the opportunity to innovate and explore a number of different routes towards achieving the net zero ambition.

The CCSA considers that any enhanced role should be given due consideration and could be better suited to the CCUS and hydrogen industries once further established, with clear methods of collaboration put in place in the shorter-term.